

# Networked Facilities Line Miles

## Networked 69 kV Lines

Count	FAC Code	Line Description	ILLINOIS LINE MILES	IOWA LINE MILES	SOUTH DAKOTA LINE MILES	MISSOURI LINE MILES	TOTAL Line Miles
1	T88	Clarinda to Red Oak		24.940			24.940
2	M76	Mid America Tap to CBPC (Wisdom) Tie		22.350			22.350
3	T79	Plymouth to LeMars South		19.067			19.067
4	R50	Clarinda to Essex Tap (CIPCO)		16.573			16.573
5	L81	Acoca To NIPCO J7 Tie		16.440			16.440
6	P74	Nashua Tap to Plainfield Tap		15.070			15.070
7	T77	Carlise to Pleasantville		14.700			14.700
8	G63	Alleman to Ames Municipal Tie		14.640			14.640
9	J90	Audubon to Templeton		14.627			14.627
10	S76	Coulter Tap to CBPC Lake Cornelia Tap		14.470			14.470
11	H45	Shenandoah to Sidney		14.400			14.400
12	H42	CBEC to Glenwood		14.196			14.196
13	T19	Eastside to Salix Jct		14.180			14.180
14	G78	Sub 59 to Sub A		14.110			14.110
15	L93	Tracy (Pella REC) Sub to Beacon Sub		13.660			13.660
16	V72	Exira to Audubon		13.650			13.650
17	K46	Sub 55 to Sub 17	10.585	2.890			13.475
18	M14	Carroll 161 to Auburn		13.000			13.000
19	S95	Knoxville to Lucas County (IES) Tie		12.990			12.990
20	G95	Clarksville to Waverly Jct.		12.690			12.690
21	J96	Clarion to Eagle Grove		12.680			12.680
22	G16	Hampton West to Sheffield		12.650			12.650
23	K55	DMEC to Indianola Sub		12.606			12.606
24	T56	Exira to NIPCO Tie		12.490			12.490
25	L27	Rockwell City Tap to Pomeroy 161		12.130			12.130
26	T39	Oskaloosa 'M' Ave. West Sub to New Sharon Sub		11.540			11.540
27	R13	DMEC to S.E. 124th St.		11.460			11.460
28	U99	Sub 56 to Sub 72		11.410			11.410
29	P68	Cherokee North to Buena Vista Co		11.253			11.253
30	S35	Plymouth to Merrill		11.240			11.240
31	K75	Denver Tap to Waverly Jct.		11.220			11.220
32	J10	Pleasantville to Knoxville		11.110			11.110
33	J25	Sheldon to NIPCO Tap		10.481			10.481
34	R58	Charles City South to Nashua Tap		10.380			10.380
35	H37	Sidney to Percival		10.110			10.110
36	S65	Glenwood to Malvern		10.085			10.085
37	S55	IPW Green Tap to Floyd		9.980			9.980
38	M44	Essex Tap (CIPCO) to Shenandoah		9.599			9.599
39	R22	Blackhawk to Janesville		9.530			9.530
40	N94	State Steel Tap to Knox Tap		9.486			9.486
41	H36	Rock Valley 69 to Inwood Tap		9.480			9.480
42	M50	Auburn to CBPC Sherwood		9.321			9.321
43	S84	Shenandoah to Imogene (CIPCO)		9.230			9.230
44	J92	NIPCO Aurelia Tap to Buena Vista		9.194			9.194
45	U56	Emerson to Red Oak		9.092			9.092
46	T82	Sac County to Storm Lake North		9.060			9.060

Note: In the analysis radial line segments are not included.  
The average line length is calculated as the sum of the line length divided by the count.

# Networked Facilities Line Miles

## Networked 69 kV Lines-Continued

Count	FAC Code	Line Description	ILLINOIS LINE MILES	IOWA LINE MILES	SOUTH DAKOTA LINE MILES	MISSOURI LINE MILES	TOTAL Line Miles
47	L47	Hampton West to Latimer Tap		8.890			8.890
48	R63	Adel to Redfield		8.840			8.840
49	H57	Sub A to Sub 84		8.587			8.587
50	P76	Clarksville to IPW Green Tap		8.520			8.520
51	T87	Carroll South to Toyne (CIPCO)		8.500			8.500
52	N86	Sheldon -Hospers		8.320			8.320
53	S48	CBEC to Sub 701		8.310			8.310
54	H83	Waukee to Adel		8.280			8.280
55	N53	Earlharm to Redfield		8.250			8.250
56	S61	Wright to Eagle Grove		8.210			8.210
57	S64	Sub 56 to Sub G		8.110			8.110
58	K86	Merrill North to Le Mars North Tap		7.970			7.970
59	K92	New Sharon Sub to Poweshiek Sub (IES)		7.860			7.860
60	H39	Prairie City to Monroe		7.792			7.792
61	J61	Monroe to Otley (Pella REC)		7.730			7.730
62	T46	Ida Grove to Battle Creek		7.730			7.730
63	R45	Sheldon to Boyden		7.710			7.710
64	N20	Knoxville Industrial Sub to Tracy Sub		7.690			7.690
65	H12	Hickory Avenue to Boyden		7.596			7.596
66	U75	MAPCO Tap to Danbury		7.565			7.565
67	L11	Sub 36 to Sub 37	7.560				7.560
68	M57	Hamburg (NWEPCO) to Percival		7.500			7.500
69	V66	S.E. 124th St. to Prairie City		7.480			7.480
70	G58	CBPC Sherwood to Rockwell City Tap		7.403			7.403
71	G39	John Deere to E 22nd & Broadway Tap		7.394			7.394
72	T13	Beacon to Mahaska		7.162			7.162
73	K94	Hudson Jct to Eagle (NIPCO)		7.150			7.150
74	M48	Thor to Goldfield		7.120			7.120
75	J36	Eagle Tap to Rock Valley 69		7.000			7.000
76	S93	Thor Tap to Humboldt East		7.000			7.000
77	V22	Earlham to Enron Tap		6.830			6.830
78	S63	Maynard to Blackhawk		6.800			6.800
79	T78	Goldfield to Eagle Grove		6.790			6.790
80	T74	Sioux City West to McCook		5.010	1.504		6.514
81	H98	Waukee to Ashawa		6.500			6.500
82	R35	Little Sioux to Cherokee South		6.500			6.500
83	J64	CBEC to Sub 706		6.489			6.489
84	J20	CBEC to Sub 705		6.410			6.410
85	V30	Buffalo Bill Tap to Elvira Tap (CIPCO)		6.361			6.361
86	H95	Buena Vista Co. to Storm Lake North		6.279			6.279
87	H23	Electrifarm to Murphy		6.230			6.230
88	M77	Sub 703 to Sub 701		6.140			6.140
89	M83	Sycamore to John Deere (Ankeny) Sub		6.050			6.050
90	N34	Hastings to Emerson		6.050			6.050
91	L82	Hills to IA Jct. Sub (CIPCO)		6.000			6.000
92	S45	Eastside to James		5.910			5.910

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## Networked 69 kV Lines-Continued

Count	FAC Code	Line Description	ILLINOIS LINE MILES	IOWA LINE MILES	SOUTH DAKOTA LINE MILES	MISSOURI LINE MILES	TOTAL Line Miles
93	U73	Sac City to CBPC Tie (West)		5.800			5.800
94	V75	Hill to IES Tie		5.520			5.520
95	T90	Sub 22 to Sub 37	5.500				5.500
96	M22	Sub S to Southpark Sub	5.457				5.457
97	M20	Kellogg to State Steel Tap		5.414			5.414
98	G31	DMEC to Carlise		5.403			5.403
99	V20	Patterson REC (CIPCO) Sub to Patterson Sub		5.400			5.400
100	S28	NIPCO (Perry) Tap to Logan Park		5.380			5.380
101	M60	2nd & Broadway Sub to Sycamore		5.310			5.310
102	H82	CIPCO/Ankeny REC Tap to John Deere		5.264			5.264
103	V44	Floyd to Charles City North		5.260			5.260
104	M63	Prairie City to Colfax		5.190			5.190
105	T18	Sub A to Sub P	0.990	4.180			5.170
106	N83	Malvern to Hastings		5.116			5.116
107	M96	Carroll South to Carroll 161		5.100			5.100
108	P24	Eagle Tap to NIPCO (Eagle) Tie		5.000			5.000
109	L41	Sub Q to Sub T		4.917			4.917
110	J78	Hampton West to CBPC (Reeve) Tie		4.750			4.750
111	L62	Sub 39 to Sub E	4.750				4.750
112	J83	Sub Q to Sub G		4.660			4.660
113	U81	Blackhawk to Denver Tap		4.630			4.630
114	T20	Sycamore to Firestone Tap		4.620			4.620
115	K28	Sub 84 to Sub 55		4.563			4.563
116	G21	E. 46th & Jefferson Sub to E. 29th & Broadway Tap		4.433			4.433
117	S73	McCook to Logan Park		3.410	1.000		4.410
118	J82	Sub 72 to Sub A		4.380			4.380
119	L94	DMEC to E. 46th & Jefferson Sub		4.320			4.320
120	U12	Otley (Pella REC) to West Pella REC (CIPCO)		4.292			4.292
121	T60	Plainfield Tap to Plainfield Sub		4.250			4.250
122	L21	Sub B to Sand Road Tap		4.220			4.220
123	L15	Sub 56 Tap to Sub 75		4.200			4.200
124	G91	Sub 56 to Sub 59		4.010			4.010
125	G68	Maynard to Ridgeway		4.000			4.000
126	T31	Sheffield to CBPC Tie		4.000			4.000
127	H61	Cherokee South to Cherokee North		3.950			3.950
128	U95	Sub 37 to Sub E	3.740				3.740
129	T62	Rock Valley 69 to Rock Valley Town Tap		3.720			3.720
130	H84	Knox Tap to Neal North		3.672			3.672
131	R82	86th & University (STR 64) Tap to Ashawa		3.600			3.600
132	K25	Sub 56 to Sub 56 Tap		3.577			3.577
133	R86	Zeidler Tap to McCoy Tap		3.500			3.500
134	S69	Plainfield Tap to Waverly Jct.		3.500			3.500
135	V25	Sub K to Hayes		3.500			3.500
136	M73	Plymouth to NIPCO (Perry) Tap		3.450			3.450
137	N50	Humboldt Central Tap to CBPC (Hope) Tie		3.431			3.431
138	S79	Sub 704 to Sub 701		3.430			3.430

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Count	FAC Code	Line Description	ILLINOIS LINE MILES	IOWA LINE MILES	SOUTH DAKOTA LINE MILES	MISSOURI LINE MILES	TOTAL Line Miles
139	S70	Blackhawk to WIDA		3.400			3.400
140	M33	Sub 55 to Buffalo Bill Tap (CIPCO)		3.320			3.320
141	S59	Beacon Sub to Oskaloosa Sub		3.280			3.280
142	J19	Emmetsburg to CBPC Tie (North)		3.260			3.260
143	M99	Knoxville Sub to Knoxville Industrial Sub		3.260			3.260
144	R27	Sub 39 to Sub 39 Tap	3.245				3.245
145	S10	Sub A to Sub 57		3.090			3.090
146	P97	38th & Franklin Sub to 28th & Rock Island Tap		3.089			3.089
147	U55	Murphy to Washburn		3.060			3.060
148	L86	CIPCO Blue Grass Tap to Sub 50		2.989			2.989
149	M97	Ashawa to WDM Sub		2.953			2.953
150	R37	Sand Road Tap to Hills		2.790			2.790
151	G92	Sac City to CBPC Tie (East)		2.780			2.780
152	U63	Forest & Vermont to ADM Tap		2.769			2.769
153	K14	Monona to NIPCO Tie		2.710			2.710
154	K71	Sub K to Frontier Tap		2.680			2.680
155	L80	Danbury to Monona		2.680			2.680
156	M53	Sub 18 to Sub S (CKT 2)	2.680				2.680
157	R61	Sub 18 to Sub S (CKT 1)	2.680				2.680
158	M51	Electrifarm to Ridgeway		2.620			2.620
159	V51	Sub 40 to Sub P	2.620				2.620
160	R68	Battle Creek to MAPCO Tap		2.570			2.570
161	R14	Meriden to Cherokee N		2.563			2.563
162	H96	Sub E to Sub A (CKT 1)	2.070	0.490			2.560
163	L18	Sub E to Sub A (CKT 2)	2.070	0.490			2.560
164	R91	Sub 40 to Sub E	2.560				2.560
165	T24	Sub 38 to Sub S	2.560				2.560
166	S66	63rd & Park Tap to 63rd & Park Sub		2.513			2.513
167	S96	Storm Lake North to Storm Lake East		2.500			2.500
168	U74	Carroll 161 to Carroll North		2.480			2.480
169	J21	Clow to Mahaska		2.479			2.479
170	G90	NIPCO (Doon Tap) to Perkins (NIPCO) Tap		2.464			2.464
171	J14	Colfax to Skunk River (ISU) Tie		2.440			2.440
172	T27	Maynard to Ziedler		2.420			2.420
173	L44	59th & Tonka Tap to 73rd & Buffalo Sub		2.413			2.413
174	M98	Ida Grove to NIPCO Tie		2.400			2.400
175	S58	Sub 36 to Sub 38	2.380				2.380
176	P81	Tracy Sub to Tracy (Pella REC) Sub		2.340			2.340
177	U58	S.E. 30th & Vandalia Sub to DMEC		2.330			2.330
178	H30	Sub 50 to CIPCO Tie		2.267			2.267
179	R56	Sub 37 to Sub 46	2.267				2.267
180	U93	Sub 706 to Sub 703		2.246			2.246
181	H81	Sub J to Sub L Tap		2.240			2.240
182	K27	Lemars North Tap to Lemars North		2.230			2.230
183	S11	Rock Valley Town Tap to NIPCO Tie		2.220			2.220
184	U62	Sub 22 to Southpark Sub	2.191				2.191

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Count	FAC Code	Line Description	ILLINOIS LINE MILES	IOWA LINE MILES	SOUTH DAKOTA LINE MILES	MISSOURI LINE MILES	TOTAL Line Miles
185	S14	McCoy Tap to Gilbertville Tap		2.180			2.180
186	L31	James to Plymouth		2.170			2.170
187	U17	Sub 75 to Sub G		2.130			2.130
188	M84	Sub P to Sub 57	0.990	1.130			2.120
189	T29	Oskaloosa Sub to Oskaloosa 'M' Ave. West Sub		2.110			2.110
190	V33	E. 17th & Washington Sub to E. 23rd & Dean Sub		2.080			2.080
191	N17	Sub G to Sub K		2.055			2.055
192	S82	Emmetsburg E to CBPC Tap		2.051			2.051
193	H50	16th & Wabash to Sec Taylor Tap		2.050			2.050
194	P48	Williams Bros (Latimer) Tap to Coulter Tap		2.000			2.000
195	S18	Indianola Sub to Indianola City Limits		1.980			1.980
196	M21	38th & Franklin Sub to 16th & College Sub		1.950			1.950
197	G85	Elivra Tap to Sub 73		1.947			1.947
198	M49	Emmetsburg to CBPC South Tie		1.931			1.931
199	K78	Sub R Tap to Sub 41	1.902				1.902
200	V59	LeMars West to LeMars North		1.870			1.870
201	J75	Ackley to CBPC Tie		1.800			1.800
202	K81	Alleman to CIPCO/Ankeny REC Tap		1.777			1.777
203	R90	Sub P to Sub R	1.770				1.770
204	K48	Sub 39 Tap to Sub 46	1.763				1.763
205	L87	Sub 41 to Sub S	1.700				1.700
206	U43	Storm Lake East to CBPC (Miles Nelson) Tie		1.700			1.700
207	G40	Sub T (FD) to Frontier Tap		1.690			1.690
208	K59	E. 29th & Broadway Tap to E. 29th & Hubbell Sub		1.670			1.670
209	V17	Hull to Hickory Avenue		1.637			1.637
210	M79	Forest & Vermont to 16th & Colldege		1.611			1.611
211	K18	S.C. Water Works Tap to Sioux City West		1.600			1.600
212	P26	Gilbertville Tap to Washburn		1.600			1.600
213	R40	ADM Tap to E. 29th & Hubbell		1.580			1.580
214	R95	Inwood Tap to Hudson Jct.		1.540			1.540
215	R81	CBPC Lake Cornelia Tap to Clarion		1.525			1.525
216	H53	Floyd to Charles City South		1.520			1.520
217	T91	16th & Wabash to River Hills		1.517			1.517
218	S94	S.E. 22nd & Scott Tap to S.E. 30th & Vandalia Sub		1.510			1.510
219	L25	Kellogg to S.C. Water Works Tap		1.500			1.500
220	T45	NIPCO Tap to Rock Valley 69		1.480			1.480
221	P55	Perkins (NIPCO) Tap to Hull		1.456			1.456
222	S31	Oskaloosa Sub to Clow		1.440			1.440
223	S78	Latimer Tap to Williams Bros (Latimer) Tap		1.430			1.430
224	L72	Charles City North to Quarry Road Tap		1.428			1.428
225	H51	Division to Eastside		1.380			1.380
226	V80	E. 17th & Washington Sub to Forest & Vermont		1.369			1.369
227	L55	Sub 73 to Dumont Tap (IPW)		1.350			1.350
228	J15	NIPCO LeMars Tap to LeMars South		1.323			1.323
229	H68	Sub 42 to Sub 18	1.310	0.000			1.310
230	J45	37th & Rock Island Sub to Monarch Tap		1.303			1.303

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# Networked Facilities Line Miles

## Networked 69 kV Lines-Continued

Count	FAC Code	Line Description	ILLINOIS LINE MILES	IOWA LINE MILES	SOUTH DAKOTA LINE MILES	MISSOURI LINE MILES	TOTAL Line Miles
231	V34	Solvay Tap to Quarry Road		1.302			1.302
232	V91	Ridgeway to CFMU Tie		1.290			1.290
233	U61	Sub 30 to Sub P	1.270				1.270
234	H40	Emmetsburg S to Emmetsburg E		1.177			1.177
235	K36	Kellogg to Division		1.160			1.160
236	S90	Sub 705 to Sub 704		1.128			1.128
237	J55	Sub 56 Tap to CIPCO Blue Grass Tap		1.118			1.118
238	T89	Humboldt East to Humboldt Central Tap		1.115			1.115
239	V53	Charles City South to Solvay Tap		1.090			1.090
240	N46	28th & Rock Island Tap to 16th & Wabash		1.087			1.087
241	S49	Sub G to Sub R Tap	0.250	0.826			1.076
242	J38	63rd & Park Sub to WDM Sub		1.070			1.070
243	K99	Sanborn Corner to Mid-America Tap		1.020			1.020
244	K44	River Hills to Forest and Vermont		1.012			1.012
245	J85	Toyne (CIPCO) to Templeton		1.000			1.000
246	G41	86th & University (STR 64) Tap to 73rd & Buffalo Sub		0.990			0.990
247	K49	E. 22nd & Broadway Tap to E. 17th & Broadway Sub		0.870			0.870
248	N78	Sub 30 to Sub R	0.860				0.860
249	T16	Janesville to Waverly Interconnection		0.827			0.827
250	U48	28th & Rock Island Tap to 37th & Rock Island Sub		0.820			0.820
251	H72	River Hills to Sec Taylor Tap (0.800mi UG)		0.800			0.800
252	H44	WIDA to CFMU Tie		0.760			0.760
253	J58	16th & Wabash Sub to DM Water Works Sub		0.660			0.660
254	R74	Lemars South to Lemars West		0.511			0.511
255	L28	NIPCO Tap to Sanborn Corner		0.492			0.492
256	N41	N.E. 7th & Broadway Tap to 2nd & Broadway Sub		0.460			0.460
257	H10	Plainfield Sub to CBPC (Plainfield) Tie		0.450			0.450
258	H52	DM Water Works Sub to 28th & Rock Island Tap		0.420			0.420
259	M95	S.E. 22nd & Market Tap to E. 23rd & Dean Sub		0.420			0.420
260	T28	E. 17th & Broadway Sub to N.E. 7th & Broadway Tap		0.394			0.394
261	H80	Carroll South Tap to Carroll North		0.350			0.350
262	V92	Carroll North Tie to Carroll South		1.927			1.927
263	L16	Merrill to Merrill North Tap		0.340			0.340
264	N38	Sub R Tap to Sub R	0.326				0.326
265	N40	59th & Tonka Tap to WDM Sub		0.290			0.290
266	M13	DMEC to PHEC Unit 3 (0.250 mi UG)		0.250			0.250
267	K10	S.E. 22nd & Scott Tap to S.E. 22nd & Market Tap		0.210			0.210
268	V77	Little Sioux to NIPCO J-3		0.150			0.150
269	N68	West Pella REC to Pella		0.087			0.087
270	J31	Firestone Tap to 2nd & Broadway Sub		0.080			0.080
271	V83	Enron Tap to CIPCO Tie		0.060			0.060
272	V26	28th & Rock Island Tap to 28th & Rock Island		0.034			0.034
273	R20	Sub L Tap to Sub B		0.019			0.019
274	G34	Schleswig NIPCO Tap		0.010			0.010
275	K51	PHEC Units 1 & 2 to DMEC (0.270 mi UG)		0.000			0.000
276	K84	Salix Jct. to Morningside (see T19)		0.000			0.000

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## Networked 69 kV Lines-Continued

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277	N28	Hospers-NIPCO Tie		0.000			
278	N43	76th & Douglas to 86th & Douglas Tap		0.740			0.740
279	R76	86th & Douglas Tap to Sycamore		6.084			6.084
280	V62	50th & Aurora Sub to 76th & Douglas Sub		2.310			2.310
281	G94	Sycamore to 50th & Aurora Sub		3.120			3.120
<b>Total Length of 69 kV Lines in Miles</b>			<b>78.046</b>	<b>1294.325</b>	<b>2.504</b>	<b>0.000</b>	<b>1374.875</b>
<b>Average Length of 69 kV Line in Miles</b>							<b>4.9</b>
<b>Count</b>							<b>281</b>

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# Networked Facilities Line Miles

## Networked 161 kV Lines

Count	FAC Code	Line Description	ILLINOIS Line Miles	IOWA Line Miles	SOUTH DAKOTA Line Miles	MISSOURI Line Miles	Total Line Miles
1	C11	Sub 39 to Sub 47	2.340				2.340
2	C12	Blackhawk to STR 95 (IPW-Hazelton Tie)		11.830			11.830
3	C13	Norwalk to Booneville		16.880			16.880
4	C15	Granger Tap to Granger		7.915			7.915
5	C17	N.E. Ankeny to Perry (ITC Midwest)		1.220			1.220
6	C18	Raun to Morningside		16.530			16.530
7	C19	Sycamore to 100th St. and 54th Ave.		4.594			4.594
8	C22	Brooks Tap to Creston		29.203			29.203
9	C26	Butler to Cedar Falls Munincipal Utilities Tap		15.930			15.930
10	C29	Victory-Carroll		16.849			16.849
11	C32	Earlham to Booneville		14.564			14.564
12	C33	Winterset Jct to Norwalk		18.630			18.630
13	C37	Metro East to Altoona		2.738			2.738
14	C39	Franklin to Butler		26.240			26.240
15	C40	60th S. to West Grand		2.250			2.250
16	C44	Blackhawk to Deere Foundry		6.200			6.200
17	C45	Sub K to Coral Ridge		7.150			7.150
18	C47	CBEC to Quick Sub		12.100			12.100
19	C48	Sub 28 to Sub 17	10.730				10.730
20	C53	Booneville to West Grand		5.674			5.674
21	C54	Sub 56 to Sub 89		22.152			22.152
22	C55	Bunge to Hastings		20.259			20.259
23	C57	Sub 39 to Sub 31 Tap	5.660				5.660
24	C58	Greenfield Plaza to S.E. Polk		7.490			7.490
25	C66	Utica Ridge to Sub 71		2.080			2.080
26	C68	Delaware to Bondurant		5.540			5.540
27	C70	DMEC to Metro East		3.738			3.738
28	C72	Sub 702 to Sub 701		1.890			1.890
29	C73	Leeds to Plymouth		6.150			6.150
30	C75	Sub 71 to Sub 88		4.050			4.050
31	C77	Sub 87 to Sub 112	11.670	0.590			12.260
32	C78	Sub 701 to NE State Line (OPPD-S1211 Tie)		6.713			6.713
33	C81	Clarinda to Hastings		31.272			31.272
34	C82	Carroll to Drager (CBPC)		5.490			5.490
35	C87	Wall Lake to Franklin (17.721 miles)		17.721			17.721
36	C90	Newport (CIPCO) to Denmark (IES)		11.300			11.300
37	C92	Sub 17 to Sub 49	3.538				3.538
38	C93	Washburn to Hazleton		28.530			28.530
39	C95	Sub 70 to Sub 88		0.800			0.800
40	C96	Grimes to Granger Tap		2.295			2.295
41	C98	MLK to Forest and Vermont (1.878mi UG)		1.878			1.878
42	D11	Electrifarm to Washburn		8.560			8.560
43	D12	Sub 58 Tap to Sub 58		2.690			2.690
44	D13	Sac to Pocahontas		27.122			27.122
45	D16	S.E. Polk to DMEC (West Line)		0.994			0.994
46	D17	Deere Engine to Electriform		2.740			2.740
47	D19	Waterloo West to Deere Engine		4.850			4.850

Note: In the analysis radial line segments are not included.  
The average line length is calculated as the sum of the line length divided by the count.



# Networked Facilities Line Miles

## Networked 161 kV Lines-Continued

Count	FAC Code	Line Description	ILLINOIS Line Miles	IOWA Line Miles	SOUTH DAKOTA Line Miles	MISSOURI Line Miles	Total Line Miles
48	D20	DMEC to Reasnor		23.300			23.300
49	D22	Sub 47 to Sub 48	2.620				2.620
50	D23	Sub 18 to Oak Grove West	3.325				3.325
51	D24	Sub 74 to Utica Ridge		2.080			2.080
52	D28	Waterloo West to Deere Foundry		0.640			0.640
53	D32	Blackhawk to Midport		3.520			3.520
54	D35	Granger to Bittersweet		7.133			7.133
55	D36	Kellogg to Leeds		3.520			3.520
56	D37	S.E. Polk to DMEC (East Line)		0.930			0.930
57	D38	16th and Wabash to MLK		0.784			0.784
58	D39	Manawa to Sub 702		2.262			2.262
59	D40	88th St. to Alice's Rd Sub		3.037			3.037
60	D41	Army Post to Greenfield Plaza		5.280			5.280
61	D44	Hills to Sub E		6.560			6.560
62	D49	142nd St Sub to Grimes		1.470			1.470
63	D50	Lundquist to Deere Northeast		4.490			4.490
64	D52	Sub Y to Sub G		3.770			3.770
65	D57	100th and Douglas to 109th and Clark		2.430			2.430
66	D58	Webster to Wright		11.769			11.769
67	D60	Clipper to Sac		2.990			2.990
68	D61	Sub 49 to IPW Tie (Beaver Channel)	4.772				4.772
69	D62	100th St. and 54th Ave. to 100th and Douglas		3.896			3.896
70	D63	Deere Foundry to Deere Components		0.910			0.910
71	D65	Sub 58 to Sub 76		2.680			2.680
72	D67	Hydrocarbon to Sub 91		2.610			2.610
73	D68	Plymouth to LeMars South Tap		9.030			9.030
74	D69	Deere Components to Lundquist		0.470			0.470
75	D71	Sub P to Sub U		1.160			1.160
76	D74	Sub 31 Tap to Sub 28	0.660				0.660
77	D76	Sub E to Sub Y		1.710			1.710
78	D85	Deere Northeast to Washburn		7.940			7.940
79	D86	Sub J to Hydrocarbon (Iowa City)		3.990			3.990
80	D88	Avoca to Teakwood		6.470			6.470
81	D89	Sub 56 to Sub 78		4.930			4.930
82	D90	Sycamore to Ankeny		7.730			7.730
83	D91	Hills to Parnell		27.560			27.560
84	D94	Neal 4 to Monona		32.259			32.259
85	D96	Sub 89 to Hills		28.760			28.760
86	D97	Forest and Vermont to Sycamore		6.816			6.816
87	E11	Ashawa to 60th St		2.210			2.210
88	E14	S.E. Polk to Easter Lake		1.651			1.651
89	E15	Sub 77 to Hydrocarbon		3.980			3.980
90	E18	Ashawa to 16th and Wabash		6.338			6.338
91	E19	Boone Jct. to Sub T (Ft. Dodge)		13.240			13.240
92	E24	Raun to Neal 4		2.120			2.120
93	E28	Plymouth to Morningside		11.171			11.171
94	E29	Wisdom to STR 93 (IELP-Triboji Tie)		12.560			12.560

Note: In the analysis radial line segments are not included.  
The average line length is calculated as the sum of the line length divided by the count.

# Networked Facilities Line Miles

## Networked 161 kV Lines-Continued

Count	FAC Code	Line Description	ILLINOIS Line Miles	IOWA Line Miles	SOUTH DAKOTA Line Miles	MISSOURI Line Miles	TOTAL Line Miles
95	E30	Altoona to Bondurant		2.130			2.130
96	E31	Webster to Hayes		14.564			14.564
97	E34	Clarinda to Brooks Tap		14.634			14.634
98	E37	Neal North to Salix Jct.		4.180			4.180
99	E39	Alice's Road Sub to 142nd St		3.720			3.720
100	E40	Wright to Wall Lake (11.680 miles)		11.680			11.680
101	E43	Sub 48 to Sub A	4.060	0.760			4.820
102	E44	S.E. Polk AF Term to S.E. Polk AB Term		0.040			0.040
103	E46	LeMars South Tap to Little Sioux		31.050			31.050
104	E48	Sub 18 to Sub 43	8.880				8.880
105	E50	CBEC to Indian Creek East		5.341			5.341
106	E55	Sub 70 to Sub A		0.560			0.560
107	E56	Raun to Neal North (North Tie)		0.620			0.620
108	E61	Sycamore to Delaware		4.460			4.460
109	E62	Sub T to Webster		14.230			14.230
110	E63	Atlantic East Tap to Adair		17.221			17.221
111	E65	CBEC-OPPD (1206)		5.871			5.871
112	E67	Sub 74 to Sub 76		4.650			4.650
113	E71	Pomeroy to Hayes		21.777			21.777
114	E73	Teakwood to Atlantic Municiple West Tap		11.106			11.106
115	E78	Ankeny to NE Ankeny		6.430			6.430
116	E79	Sub T to Tate&Lyle		9.172			9.172
117	E80	Cedar Falls Munincipal Utilities Tap to Blackhawk		7.902			7.902
118	E81	Raun to Neal North (South Tie)		0.620			0.620
119	E83	River Bend to Bunge		1.883			1.883
120	E84	109th and Clark to Ashawa		3.305			3.305
121	E85	Sub 18 to Oak Grove East	3.325				3.325
122	E95	Monona to Victory		33.692			33.692
123	E96	Little Sioux to Clipper		20.050			20.050
124	F14	CBEC to River Bend		0.436			0.436
125	F15	Sub 87 to Newport (CIPCO)		12.690			12.690
126	F19	Sub J to Sub U		2.450			2.450
127	F20	Glover & Watrous to 16th and Wabash		2.650			2.650
128	F23	N.E. Ankeny to Jasper (ITC Midwest)		1.220			1.220
129	F25	Sub 74 to Sub 58 Tap		1.090			1.090
130	F27	Winterset Jct. to Creston		24.120			24.120
131	F28	Oak Grove to Galesburg	32.050				32.050
132	F29	Lundquist to Midport		3.260			3.260
133	F30	Ashawa to 88th St.		4.180			4.180
134	F31	Plymouth to WAPA Sioux City		1.200			1.200
135	F35	Raun to NE State Line (OPPD/NPPD-Tekamah Tie)		1.550			1.550
136	F36	Hydrocarbon (Iowa City) to Hills		3.390			3.390
137	F40	Pocahontas to Pomeroy		4.933			4.933
138	F44	Drager (CBPC) to Grand Jct (ALTW)		29.650			29.650
139	F45	Quick Sub to Avoca		21.300			21.300
140	F47	Sub 85 to Sub 56		7.450			7.450
141	F48	OGS to Wapello		18.880			18.880

Note: In the analysis radial line segments are not included.  
The average line length is calculated as the sum of the line length divided by the count.

# Networked Facilities Line Miles

## Networked 161 kV Lines-Continued

Count	FAC Code	Line Description	ILLINOIS Line Miles	IOWA Line Miles	SOUTH DAKOTA Line Miles	MISSOURI Line Miles	TOTAL Line Miles
142	F50	Parnell to Powesheik		32.950			32.950
143	F56	Utica Ridge to Sub 91		8.150			8.150
144	F57	Coral Ridge to Sub P		2.164			2.164
145	F61	Norwalk to Grnfld Plaza		4.420			4.420
146	F68	Raun to Interchange		9.010			9.010
147	F70	Sub 18 to Sub 85	2.910	0.930			3.840
148	F76	Clarinda to MO State Line (St. Joseph L&P Tie)		12.300			12.300
149	F77	Sub P-Riser #1/Riser #2-Northgate		3.537			3.537
150	F77	underground section (F77)		0.860			0.860
151	F78	Sub 74 to Sub 77		2.980			2.980
152	F81	Hayes-Tate&Lyle		0.970			0.970
153	F83	Indian Creek East to Manawa		0.293			0.293
154	F84	Interchange to Kellogg		4.620			4.620
155	F85	LeMars South Tap to LeMars South		11.346			11.346
156	F86	Adair to Earlham		24.896			24.896
157	F90	Glover & Watrous to Easter Lake		3.709			3.709
158	F91	Sub 18 to Sub 112	14.280				14.280
159	F92	Floyd to Emery (36.070 miles)		36.020			36.020
160	F94	Sub 78 to Sub 58 Tap		1.550			1.550
161	F95	Sub 43 to Sub 39	10.420				10.420
162	F96	Ashawa to Army Post		4.280			4.280
163	F99	Granger Tap to 100th&54th Ave		0.965			0.965
<b>Total Length of 161 kV Lines in Miles</b>			<b>121.240</b>	<b>1289.594</b>	<b>0.000</b>	<b>0.000</b>	<b>1410.834</b>
<b>Average Length of 161 kV Line in Miles</b>							<b>8.7</b>
<b>Count</b>							<b>163</b>

Note: In the analysis radial line segments are not included.  
The average line length is calculated as the sum of the line length divided by the count.

# Networked Facilities Line Miles

## Networked 345 kV Lines

Count	FAC Code	Line Description	ILLINOIS Line Miles	IOWA Line Miles	SOUTH DAKOTA Line Miles	MISSOURI Line Miles	Total Line Miles
1	A11	Bondurant to Montezuma		49.905			49.905
2	A23	Booneville to MO State Line (NPPD-Cooper Tie)		97.126			97.126
3	A34	Sycamore N to Grimes North		7.636			7.636
4	A37	Sub K to Hills		12.680			12.680
5	A40	GDMEC to S.E. Polk		1.280			1.280
6	A47	CBEC to Madison County Switching Station		111.305			111.305
7	A51	Sub 93 (Louisa) to Oak Grove Sub	27.075	0.500			27.575
8	A55	Sub 93 (Louisa) to Sub 92		23.919			23.919
9	A56	Sub 93 (Louisa) to Sub T		25.636			25.636
10	A59	CBEC to NE State Line (OPPD-S3456 Tie)		6.160			6.160
11	A70	DAEC Tap to Hazelton (STR D542-D451)		18.115			18.115
12	A72	Grimes South to Sycamore S		7.636			7.636
13	A76	Sub 56 to Walcott		6.379			6.379
14	A77	Norwalk to S.E. Polk		10.020			10.020
15	A90	Montezuma to Hills		53.599			53.599
16	A91	Sub 39 to Cordova	15.452				15.452
17	A94	Sub K to DAEC Tap (STR D542)		29.340			29.340
18	A98	Grimes South to Booneville		16.712			16.712
19	A99	Booneville to Madison County Switching Station		13.150			13.150
20	B11	MO State Line to Atchison County				6.350	6.350
21	B12	Raun to Neal 4		2.120			2.120
22	B21	Walcott to Sub 92		21.500			21.500
23	B23	Atchison County to Cooper (NPPD-Cooper Tie)				17.189	17.189
24	B27	Raun to WAPA Sioux City		23.590			23.590
25	B31	Raun to NE State Line (OPPD-Ft Calhoun Tie)		1.080			1.080
26	B32	OGS to Montezuma		36.400			36.400
27	B41	Grimes North to Lehigh		61.660			61.660
28	B44	Raun to MN State Line (ISP-Lakefield Tie)		98.682			98.682
29	B53	Raun to Neal North		0.780			0.780
30	B62	Sub 56 to Sub 91		13.373			13.373
31	B64	Sub 91 to QCPS	0.635	13.000			13.635
32	B66	Sub 39 to Oak Grove Sub	19.964				19.964
33	B67	Raun to Lehigh		116.143			116.143
34	B72	QCPS to MEC Cordova		2.225			2.225
35	B73	Sycamore to Bondurant		9.378			9.378
36	B75	Madison Co Sw Sta to Norwalk		14.620			14.620
37	B78	Lehigh to Webster		14.493			14.493
38	B81	GDMEC to Bondurant		8.660			8.660
39	B82	Raun to NE State Line (NPPD-Hoskins Tie)		1.080			1.080
40	B88	CBEC-Grimes		123.800			123.800
41	B90	Sub 92 to Hills		16.316			16.316
42	B95	Adams to Hazelton (STR B255-B330)		15.939			15.939
<b>Total Length of 345 kV Lines in Miles</b>			<b>63.126</b>	<b>1085.937</b>	<b>0.000</b>	<b>23.539</b>	<b>1172.602</b>
<b>Average Length of 345 kV Line in Miles</b>							<b>27.9</b>
<b>Count</b>							<b>42</b>

Note: In the analysis radial line segments are not included.  
The average line length is calculated as the sum of the line length divided by the count.